COUNTY BOROUGH OF SOUTH SHIELDS.

REPORT

ON THE

HEALTH OF THE BOROUGH

DURING

1893,

BY

W. H. TURNBULL, M.B., B.HY., DUNELM,

MEDICAL OFFICER OF HEALTH,

MEDICAL SUPERINTENDENT DENES FEVER HOSPITAL

AND

WHITELEAS SMALL-POX HOSPITAL.

*With the Compliments of the Medical Officer
of Health.*

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INTRODUCTORY.

TO THE CHAIRMAN AND MEMBERS OF THE SANITARY COMMITTEE.

Mr. Chairman and Gentlemen,

I have the honour of presenting to you my second Annual Report on the Health of the Borough, being the nineteenth presented to you by successive Medical Officers of Health.

The year 1893 will long be remembered as an exceptional one, on account of the long period of sunshine and heat which we experienced.

Unfortunately, the year was also marked by an unusual amount of sickness, affecting apparently all classes of the community, and considerably increasing the death-rate. The latter rose from 19·1 in 1892, to 21·9 in 1893.

A large part of this increase was due to the class of diseases known as Zymotic. The most fatal Zymotic was Diarrhœa, which caused 129 deaths; Enteric Fever was very prevalent, and caused 29 deaths; Scarlatina was epidemic throughout the year, especially during the last quarter. Of other diseases, those of the lungs including Phthisis were most fatal, causing in all 508 deaths.

I remain, Gentlemen,
Yours obediently,
W. H. TURNBULL.

Health Department,
South Shields,
June, 1894.

REPORT, 1893.

VITAL STATISTICS.

The estimated population for the year, based upon the rate of increase between the census of 1881 and 1891, is 84,284.

Births.—During the year 1893, 2,916 births were registered as having occurred in the Borough, being at the rate of 34·59 per thousand, as compared with a rate of 36·5 for the previous year. The births occurred in the two Registration Districts as follows :—

Shields District	Legitimate	133	140.
	Illegitimate	7	
Westoe District	Legitimate	2697	2776.
	Illegitimate	79	
Totals	Legitimate	2830	2916.
	Illegitimate	86	

Deaths.—The deaths occurring in the Borough during the year, amounted to 1858 : of these, 107 occurred in Harton Workhouse, and 2 in Whiteleas Smallpox Hospital among persons formerly belonging to South Shields, and excluding the deaths of 12 persons not belonging to South Shields, we have a total of 1846, which yields a gross death-rate of 21·9 per thousand of the population.

Of the total deaths, 971 were of males and 856 of females, a proportion of 1134 males to 1000 females.

DEATH-RATES IN SOUTH SHIELDS.

1882	20·5
1883	21·2
1884	22·2
1885	22·2
1886	20·3

DEATH-RATES IN SOUTH SHIELDS (*Continued*).

1887	20·9
1888	17·6
1889	20·5
1890	21·1
1891	22·0
1892	19·1
1893	21·9

DEATH-RATES AND BIRTH-RATES PER THOUSAND THROUGHOUT ENGLAND AND WALES, 1893.

	Birth-rate.	Death-rate.	Zymotic-rate.	Infantile Mortality.
England and Wales......	30·8	19·2	2·47	159
33 Large Towns	31·9	21·5	3·18	182
67 Smaller Towns........	31·8	19·1	2·84	173
South Shields.........	**34·59**	**21·9**	**3·09**	**180**

QUARTERLY DEATH-RATES PER THOUSAND OF THE POPULATION.

	Total Death-rate.	Zymotic Death-rate.	Phthisis.	Lung Diseases except Phthisis.	Deaths under one year, per 1,000 Births.	Death-rate under 5 years per 1,000 of the population.
First Quarter	22·6	1·9	2·3	5·1	147	9·4
Second Quarter	19·0	2·1	2·6	3·0	144	8·0
Third Quarter............	24·4	6·6	1·4	3·1	257	13·8
Fourth Quarter	21·3	1·5	1·7	5·8	175	8·7
Year	21·9	3.09	1·9	4·1	180	10·0

Infantile Mortality.—During the year, the deaths of 527 children under one year of age were registered, equal to 28·6 per cent.

of the total deaths, and equivalent to 180 per thousand births, a number very much above that of the whole of England and Wales.

The deaths of children under five years of age were 843, or nearly 46 per cent. of the total deaths.

Zymotic Diseases.—The number of deaths registered from the principal Zymotic Diseases was 261, as follows :—

Smallpox.	Cholera.	Measles.	Scarlet Fever.	Diphtheria.	Whooping Cough.	" Fever."	Diarrhœa
2	2	32	32	5 (inclusive of 3 from Membranous Croup.	30	29	129

The zymotic death-rate 3·09, was the highest recorded during the past eight years, and nearly double that of the previous year 1892, the increase being chiefly due to deaths from Diarrhœa.

ZYMOTIC-RATES—SOUTH SHIELDS.

Year.	Small-pox.	Scarlet Fever.	" Fever"	Diph-theria.	Measles.	Whoop-ing Cough.	Diarr-hœa.	Total Zymotic rate.
Mean 1871-80	·85	1·44	·79	·12	·42	·78	1·59	6·02
1881	·01	·19	·31	·03	·45	·17	·41	1·6
1882	·01	·55	·25	·06	·15	·76	·77	2·58
1883	·03	·52	·26	·04	·55	·32	·57	2·32
1884	·03	·23	·28	·11	·20	·52	1·39	2·78
1885	·00	1·16	·09	·04	·85	·56	·47	3·20
1886	·01	·71	·16	·08	·00	·65	1·05	2·68
1887	·01	·77	·11	·15	·51	·10	·95	2·63
1888	·00	·15	·13	·12	·04	·57	·22	1·25
1889	·00	·13	·10	·22	·64	·54	·98	2·64
1890	·00	·10	·24	·15	·02	·18	1·00	1·72
Mean 1881-90	·01	·45	·19	·10	·34	·43	·78	2·34
1891	·00	·11	·18	·29	·89	·59	·73	2·82
1892	·00	·12	·17	·09	·29	·33	·55	1·5
1893	·023	·38	·34	·02	·38	·36	1·53	3.09

Scarlet Fever.—Scarlet Fever was epidemic in the Borough during the whole of the year, and especially so during September and October, when the Notifications rose to 90 and 99 in those months respectively. The total number of Notifications during the year was 609, with 32 deaths, giving a death-rate of 5·2 per cent. and ·37 per thousand of the population. The great majority of these cases occurred in children, the disease is comparatively rare in adults, and all the deaths occurred in children under 15 years of age.

As to the cause of such a prevalence of the disease, it is difficult to assign a reason. It is generally admitted that there is at certain periods a sort of wave influence, atmospheric or otherwise, rendering the poison more diffusible and virulent, or persons more susceptible to the disease. But undoubtedly, a large number of cases occur from neglect by the parents of the simplest rules of prevention, namely, Isolation and Disinfection.

Measles and Whooping Cough.—These two diseases were very prevalent during the first six or seven months, and then almost entirely disappeared. Measles caused 32 deaths, and Whooping Cough 30, yielding death-rates of ·37 and ·35 per thousand of the population.

In the case of Measles 94 per cent., and of Whooping Cough 97 per cent. of the deaths occurred in children under 5 years of age.

Smallpox.—At the beginning of the year, the town was quite free from Smallpox, though there were six cases in the Hospital remaining over from the previous year ; but as the disease was very prevalent in certain parts of the country, and more particularly in the Midland Counties, it was not long before the Borough was again invaded by the disease. The first case occurred early in February, in the person of a vagrant, and from this time the numbers began rapidly to increase, until in the month of May the disease began to assume serious epidemic proportions, but happily, we were always able to cope with it, and it entirely died out in July. During the remainder of the year, no cases occurred.

The number of cases notified in each month, were as follows :—

February	1	Total, 45.
March	6	
April	12	
May	18	
June	7	
July	1	

All of these cases were removed to Hospital, together with six from the Workhouse, and one from the district of the Rural Sanitary Authority. Of the 45 cases which occurred in the Borough, at least eight of them were fresh introductions, four cases being vagrants and four seamen. Of the cases which occurred in the Workhouse, three were vagrants, and the rest inmates.

The case which occurred in Boldon, in the district of the Rural Sanitary Authority, was brought from Scotland, so that of a total of 51 cases occurring in the Borough and the Workhouse, 11 were newly imported cases : seven by vagrants, and four by seamen.

So far as I could ascertain, in no instance was a second case contracted from one of the seamen, and no fresh introduction occurred in any other way than by these sources.

The whole brunt of the epidemic then falls upon the vagrants. All of these men had of course been in the town, for although the Workhouse is outside of the Borough boundary, it is necessary for them to journey to the heart of the town to obtain the necessary ticket.

In a good many instances, I was able directly to trace the origin of the case to one or other of them.

South Shields was not by any means alone in the country in having this disease imported by vagrants. A very valuable report was prepared last year by Dr. Armstrong of Newcastle-upon-Tyne, upon this question. The following is a summary of the information he obtained :—" Of 63 towns invaded, the Medical Officers of Health of which have been so good as to favour me with particulars, 37 or 59 per cent. had the infection primarily from vagrants. The disease was brought secondarily by vagrants into 36 towns, including some into which first cases had also been brought by the same class of persons. Such secondary infections occurred as often as nine times in Carlisle, Southampton, and Sunderland, and 12 times in Warrington, 15 times in Keighley, 18 times in Blackburn, and no less than 25 times in Nottingham!

In 19 instances only, out of the 63 towns reporting, was Smallpox infection stated to have been brought otherwise than by vagrants, and in seven of these it was subsequently re-introduced by vagrants no less than 25 times. Tramps bring their infectious diseases either to Workhouses or to Common Lodging Houses, according to the returns on which my return is based in the above-mentioned instances, infected vagrants were housed 31 times in the former, and 80 times in the latter."

It will be readily seen that vagrants, on account of their habits, have exceptional opportunities for spreading infectious disease, wandering about the country at will, as they do.

But when the public health is seriously menaced by these individuals, it is surely time that the law stepped in to prevent it. The professional tramp does not benefit the community in the least degree, is idle, lazy, and as often as not a thief, and any enactment having for its object the compulsory detentions, or in any way, the restraining of the movements of vagrants during epidemic periods ought to be strongly supported.

Cholera.—The number of persons arriving by ship, and notified to us as coming into the Borough in accordance with the order of the Local Government Board, to that effect was 1,593.

These persons were all visited on receipt of the information, and kept under close observation, where necessary. The number who could not be found was much smaller than during the previous year owing, no doubt, to the prompt action of the Tyne Port Sanitary Authority in prosecuting defaulters in several instances. Fortunately no sickness of a choleraic nature was found in any of them.

Two cases certified, on examination of the excreta, to be Asiatic Cholera occurred during the year. The first case was brought to my notice on September 15th. The patient, a tradesman in the town, had taken ill during the previous night with severe choleraic symptoms. Pending a thorough investigation, I at once caused precautions to be taken, as thought it were true Cholera. He was during the day removed from his lodging to the Denes Hospital, and all the bedding and other articles in the room, liable to retain infection, were destroyed by fire. He rallied somewhat during the first two days, but on the third day developed acute symptoms of delirum tremens and died. The source of the disease must be purely surmise. He had not been out of the town at least for some weeks, and owing to his condition, it was impossible to obtain any definite history of his actions during the week preceding his illness. The only possible clue which I could obtain was, that on the day previous to its onset, he had partaken of some tomatoes which were probably foreign fruit, though I was unable to trace them.

On October 1st, I was asked to see a man suffering from severe symptoms of a Choleraic character. The illness being of a very suspicious nature, I had him removed to Hospital, and the premises, etc., thoroughly disinfected. He died on the 2nd October, after only 30 hours illness. In this case there was no history whatever to indicate the source of the disease, but this patient also being of somewhat intemperate habits, I was quite unable to trace his movements during the week or so preceding the onset. In both cases I am indebted to Dr. George Murray of Newcastle for his assistance in kindly undertaking the Bacterioligical Examination of the Excreta, his report in each case being, that the disease was Asiatic Cholera. What then was the origin of these cases? How was the infection brought here, and how did it reach these two persons? These questions I cannot pretend definitely to answer. There was certainly an excessive amount of Diarrhœa in the Borough last summer, chiefly confined to infants and young children, but there were also several cases of a Choleraic nature amongst adults, and eight fatal cases occurred in persons between the ages of 15 and 70; of these cases I was not informed at the time that they occurred, but from what I was told afterwards with regard to some of them, there was certainly room for grave suspicion as to their real nature.

It is generally admitted that mild cases of Cholera are not readily distinguished from acute diarrhœa, and the usual experience in a as shown by the notifications received of the one and of the deaths registered of the other, and having satisfied myself that neither the water supply nor milk was in any associated with it, it struck me that in the exceptional atmospheric conditions some explanation might be found. I therefore compiled the following table, showing the average weekly temperatures of the air and of the soil at one and four feet respectively, and the number of cases of Enteric Fever notified and of the deaths from Diarrhœa registered.

Week ending.	Mean Temperature	Mean Weekly 1 foot.	Mean Weekly 4 feet.	Enteric Notifications.	Deaths from Diarrhœa.
July 1	58·1	58·0	55·0	0	2
,, 8	57·5	59·8	55·0	3	0
,, 15	58·0	58·4	55·9	2	8
,, 22	59·2	58·2	55 9	1	10
,, 29	57·8	58·1	55·5	1	7
August 5	58·7	57·9	55·0	5	7
,, 12	61·7	59·8	55·1	5	4
,, 19	67·9	63·3	56·7	4	9
,, 26	60·3	59·2	57·8	2	17
Sept. 2	57·3	57·3	56·7	9	15
,, 9	57·7	56·9	56·0	17	13
,, 16	54·8	53·3	55·3	22	13
,, 23	52 2	52·5	54·9	12	10
,, 30	49·9	49·5	50·3	6	5
October 7	45·0	47·3	51·3	6	2
,, 14	48·6	47·4	50·2	14	2
,, 21	54·3	51·2	50·5	6	0
,, 28	49·0	47·5	50·5	6	0
Nov. 4	41·7	42·0	48·8	6	0
,, 11	41·2	41·3	41·0	1	0
,, 18	44·6	44·0	46·5	5	0
,, 25	39·8	39 9	45·7	1	0

The result was very striking : that there was an intimate relationship between the two diseases is apparent. There is a difference of some four weeks between the times that the figures in the two columns reached the greatest number, but taking into account that the incubation period of Enteric Fever is from two to three weeks, and that some 10 to 14 days more must pass before a positive diagnosis can be made, this period is accounted for. Would it not appear, therefore, that the cause of both diseases is to be explained by the symptoms. Pending a thorough investigation, I at once caused precautions to be taken, as thought it were true Cholera. He was during the day removed from his lodging to the Denes Hospital, and all the bedding and other articles in the room, liable to retain infection, were destroyed by fire. He rallied somewhat during the first two days, but on the third day developed acute symptoms of delirum tremens and died. The source of the disease must be purely surmise. He had not been out of the town at least for some weeks, and owing to his condition, it was impossible to obtain any definite history of his actions during the week preceding his illness. The only possible clue which I could obtain was, that on the day previous to its onset, he had partaken of some tomatoes which were probably foreign fruit, though I was unable to trace them.

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,, 8	57·5	59·8	55·0	3	0
,, 15	58·0	58·4	55·9	2	8
,, 22	59·2	58·2	55·9	1	10
,, 29	57·8	58·1	55·5	1	7
August 5	58·7	57·9	55·0	5	7
,, 12	61·7	59·8	55·1	5	4
,, 19	67·9	63·3	56·7	4	9
,, 26	60·3	59·2	57·8	2	17
Sept. 2	57·3	57·3	56·7	9	15
,, 9	57·7	56·9	56·0	17	13
,, 16	54·8	53·3	55·3	22	13
,, 23	52 2	52·5	54·9	12	10
,, 30	49·9	49·5	50·3	6	5
October 7	45·0	47·3	51·3	6	2
,, 14	48·6	47·4	50·2	14	2
,, 21	54·3	51·2	50·5	6	0
,, 28	49·0	47·5	50·5	6	0
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Diarrhœa.—The total number of deaths registered under this heading was 129, the death-rate being 1·53 per thousand of the population. Of these 74 occurred in children under one year of age, and 46 between the ages of one and five years. Last year the rate was ·55 with 45 deaths registered. This terrible increase is certainly alarming. The causes are probably numerous. Ill-feeding, uncleanliness, and over-crowding are certainly important factors, but there are probably others which are not well recognised or understood. Under the headings, Cholera and Fevers will be found further remarks with regard to Diarrhœa.

Infectious Disease (Notification) Act, 1889.—The following Table shows the numbers of notifications of the notifiable diseases received during each month of the year.

MONTH.	Smallpox.	Cholera.	Diphtheria.	Membranous Croup.	Erysipelas.	Scarlet Fever.	Typhus Fever.	Enteric Fever.	Continued Fever.	Puerperal Fever.	Relapsing Fever.	TOTALS.
January	...	...	6	...	8	25	...	8	...	2	1	50
February	1	...	3	2	6	41	...	6	...	2	...	61
March	6	...	5	1	4	49	...	5	...	...	...	70
April	12	...	6	...	7	39	...	3	...	...	...	67
May......................	18	...	4	1	6	35	...	5	1	1	...	71
June	7	..	2	1	7	36	...	4	...	...	...	57
July	1	...	4	...	5	32	...	8	...	1	..	51
August	...	...	4	...	11	44	...	19	...	1	..	79
September	...	1	2	...	13	90	...	61	4	1	1	173
October	...	1	4	2	16	99	...	37	1	...	2	162
November	...	...	5	...	11	50	...	9	...	2	1	78
December	...	...	6	1	19	69	...	6	1	..	1	103
Totals...........	45	2	51	8	113	609	...	171	7	10	6	1022

The total 1022, is very much in excess of that of last year, 622; and on comparing the two, it will be seen that the number of notifications under each head is much larger this year than last in

Whiteleas Hospital.

This Hospital was opened for patients on March 15th, when four cases of Smallpox were transferred from the Denes Hospital. Up to the end of the year, 50* patients were treated there with four deaths. These included 44 from the Borough, five from the Workhouse, and one from the district of the Rural Sanitary Authority. During the warm dry summer the building answered its purpose in every way, but on the approach of winter certain defects requiring to be remedied made themselves apparent.

* Including four admitted from Denes Hospital.

VITAL STATISTICS OF SOUTH SHIELDS COMPARED WITH 29 LARGE TOWNS.

BOROUGH.	Estimated population middle of 1893.	Birth Rate.	Death Rate.	Zymotic Death Rate.	Infantile Mortality. Deaths under 1 year per 1,000 Births.	Average Death Rate 10 years.
Bath	51,843	20·4	18·5	0·5	119	
Birkenhead	103,817	33·0	20·53	3·7	197	19·66
Bradford	221,610	27·58	20·90	3·22	198	19·37
Bristol	225,146	30·3	18·9	1·6	141	19·27
Cardiff	142,346	35·9	19·6	2·8	171	21·5
Coventry	54,700	30·0	17·0	1·07	159	18·1
Derby	97,341	32·0	18·2	1·9	155	18·5
Gateshead	90,961	35·75	18·89	3·29	137	21·09
Hanley	56,547	37·6	20·2	3·8	189	20·3
Huddersfield	97,522	23·77	17·43	1·38	141	19·68
Hull	208,639	35·0	21·5	3·9	202	19·4
Leeds	382,094	32·4	22·3	3·8	206	21·7
Lincoln	42,429	27·9	19·3	2·0	175	18·1
Manchester	517,760	33·4	24·3	2·0	201	24·4
Northampton.	62,844	29·3	17·0	2·4	173	17·6
Oldham	136,469	28·5	20·9	2·55	186	23·7
Oxford	49,200	25·8	15·4	2·55	135	16·08
Plymouth	86,781	29·8	21·4	2.71	171	21·6
Portsmouth	167,285	28·14	18·28	3·09	161	18·4
Reading	62,833	29·49	14·85	1·62	119	16·54
Sheffield	333,922	34·7	22·25	3·6	193	22·5
Southampton	66,774	30·17	19·5	2·5	157	18·4
South Shields	**84,824**	**34·59**	**21·9**	**3·09**	**180**	**20·77**
Stockton	50,000	36·14	19·4	1.54	155	20·77
Walthamstow	52,000	31·0	15·5	2·4	131	15·4
Wigan	57,071	40·6	24·2	5·1	187	24·4
Willesden	69,159	32·56	15·31	2·29	187	14.62
Wolverhampton	84,298	34·5	22·0	3·3	206	21·0
Worcester	43,480	28·6	19·2	2·1	166	20·7
Great Yarmouth	49,891	28·40	19·64	3·02	175	20·09

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Diarrhœa.—The total number of deaths registered under this heading was 129, the death-rate being 1·53 per thousand of the population. Of these 74 occurred in children under one year of age, and 46 between the ages of one and five years. Last year the rate was ·55 with 45 deaths registered. This terrible increase is certainly alarming. The causes are probably numerous. Ill-feeding, uncleanliness, and over-crowding are certainly important factors, but there are probably others which are not well recognised or understood. Under the headings, Cholera and Fevers will be found further remarks with regard to Diarrhœa.

Infectious Disease (Notification) Act, 1889.—The following Table shows the numbers of notifications of the notifiable diseases received during each month of the year.

MONTH.	Smallpox.	Cholera.	Diphtheria.	Membranous Croup.	Erysipelas.	Scarlet Fever.	Typhus Fever.	Enteric Fever.	Continued Fever.	Puerperal Fever.	Relapsing Fever.	TOTALS.
January	...	...	6	...	8	25	...	8	...	2	1	50
February	1	...	3	2	6	41	...	6	...	2	...	61
March	6	...	5	1	4	49	...	5	...	...	...	70
April	12	...	6	...	7	39	...	3	...	...	...	67
May.....................	18	...	4	1	6	35	...	5	1	1	...	71
June	7	..	2	1	7	36	...	4	...	...	...	57
July	1	...	4	...	5	32	...	8	...	1	..	51
August	...	...	4	...	11	44	...	19	...	1	..	79
September	...	1	2	...	13	90	...	61	4	1	1	173
October	...	1	4	2	16	99	...	37	1	...	2	162
November	...	...	5	...	11	50	...	9	...	2	1	78
December	...	...	6	1	19	69	...	6	1	..	1	103
Totals............	45	2	51	8	113	609	...	171	7	10	6	1022

The total 1022, is very much in excess of that of last year, 622; and on comparing the two, it will be seen that the number of notifications under each head is much larger this year than last in

Whiteleas Hospital.

This Hospital was opened for patients on March 15th, when four cases of Smallpox were transferred from the Denes Hospital. Up to the end of the year, 50* patients were treated there with four deaths. These included 44 from the Borough, five from the Workhouse, and one from the district of the Rural Sanitary Authority. During the warm dry summer the building answered its purpose in every way, but on the approach of winter certain defects requiring to be remedied made themselves apparent.

* Including four admitted from Denes Hospital.

VITAL STATISTICS OF SOUTH SHIELDS COMPARED WITH 29 LARGE TOWNS.

BOROUGH.	Estimated population middle of 1893.	Birth Rate.	Death Rate.	Zymotic Death Rate.	Infantile Mortality. Deaths under 1 year per 1,000 Births.	Average Death Rate 10 years.
Bath	51,843	20·4	18·5	0·5	119	
Birkenhead	103,817	33·0	20·53	3·7	197	19·66
Bradford	221,610	27·58	20·90	3·22	198	19·37
Bristol	225,146	30·3	18·9	1·6	141	19·27
Cardiff	142,346	35 9	19·6	2·8	171	21·5
Coventry	54,700	30·0	17·0	1·07	159	18·1
Derby	97,341	32·0	18·2	1·9	155	18·5
Gateshead	90,961	35·75	18·89	3·29	137	21·09
Hanley	56,547	37·6	20·2	3·8	189	20·3
Huddersfield	97,522	23·77	17·43	1·38	141	19·68
Hull	208,639	35·0	21·5	3·9	202	19·4
Leeds	382,094	32·4	22·3	3·8	206	21·7
Lincoln	42,429	27·9	19·3	2·0	175	18·1
Manchester	517,760	33·4	24·3	2·0	201	24·4
Northampton.	62,844	29·3	17·0	2·4	173	17·6
Oldham	136,469	28·5	20·9	2·55	186	23·7
Oxford	49,200	25·8	15·4	2·55	135	16·08
Plymouth	86,781	29·8	21·4	2.71	171	21·6
Portsmouth	167,285	28·14	18·28	3·09	161	18·4
Reading	62,833	29·49	14·85	1·62	119	16·54
Sheffield	333,922	34·7	22·25	3·6	193	22·5
Southampton	66,774	30·17	19·5	2·5	157	18·4
South Shields	**84,824**	**34·59**	**21·9**	**3·09**	**180**	**20·77**
Stockton	50,000	36·14	19·4	1.54	155	20·77
Walthamstow	52,000	31·0	15·5	2·4	131	15·4
Wigan	57,071	40·6	24·2	5·1	187	24·4
Willesden	69,159	32·56	15·31	2·29	187	14.62
Wolverhampton	84,298	34·5	22·0	3·3	206	21·0
Worcester	43,480	28·6	19·2	2·1	166	20·7
Great Yarmouth	49,891	28·40	19·64	3·02	175	20·09

GENERAL SANITARY WORK.

The report of the Inspector of Nuisances is appended, from which it will be seen that the work in that department has been carried on with the usual zeal and activity. The work of this department is difficult and often unpleasant, but on the whole very little friction has occurred. The need, however, for an increased staff is very pressing, it is impossible that two Inspectors can efficiently cope with the work required to be done in a town of the size and importance of South Shields.

Seamen's Boarding Houses.—The number of applications for licenses under the Bye-laws was 43, and after examination of the premises in each case, 21 were recommended for a license which was granted, and 22 refused.

Housing of the Working Classes Act, 1890.—The number of houses dealt with under this Act was 18. The notices were all complied with, but only in one instance were the necessary repairs carried out and the house re-opened.

Customs and Inland Revenue Act, 1890.—No applications were received during the year for Certificates for exemption from inhabited house duty under this Act.

Slaughter Houses and Offensive Trades.—It is to be regretted that no action has yet been taken with regard to these, although the subject has been several times strongly brought before the Committee. Some of these places are in a deplorable condition from a Sanitary standpoint, and energetic action on the part of the Committee is imperative, as to the putting in force the requirements of the Public Health Act, 1875. (An Inspector to act as Inspector under the Food and Drugs Acts, of Slaughter Houses, Meat, &c., was appointed in February of this year, but no action has as yet been taken as to Bye-laws, &c.

Bye-laws as to New Streets and Buildings.—The Bye-laws at present in force in the Borough were made in 1853, and are entirely out of date, and unsuitable to the requirements of the present day. A movement is on foot to revise them, but in a matter of such importance more energetic action is necessary.

APPENDICES.

TABLE I.—CAUSES OF DEATH, 1893, ARRANGED ACCORDING TO THE CLASSIFICATION OF THE REGISTRAR GENERAL.

	AGES.											Totals.	
	0 to 1	1 to 5	5 to 15	15 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 to 75	75 to 85	85 and upwards.		55 to 60
I.—Specific Febrile or Zymotic Diseases	102	109	24	9	9	5	7	8	1	...	...	274	5
II.—Parasitic Diseases	...	...	...	...	...	...	...	...	...	...	...	...	...
III.—Dietic Diseases	...	...	...	...	...	3	2	...	...	...	...	5	...
IV.—Constitutional Diseases	27	60	32	45	47	41	40	21	10	2	...	325	9
V.—Developmental Diseases	65	...	...	...	...	...	...	4	27	42	8	146	1
VI.—Local Diseases	212	128	31	33	43	72	115	114	102	34	3	887	44
VII.—Deaths from Violence	7	8	10	7	6	8	2	11	7	1	...	67	4
VIII.—Deaths from Ill-defined and not Specified Causes	114	11	1	4	...	3	2	8	8	3	...	154	5
Totals	527	316	98	98	105	132	168	166	155	82	11	1858	68
I.—SPECIFIC OR FEBRILE CAUSES.													
1.—*Miasmatic Diseases.*													
Smallpox Vaccinated	1	...	...	...	...	...	...	1	...	...	...	2	1
Smallpox Unvaccinated	...	...	...	...	1	...	...	...	...	...	...	1	...
Smallpox Unknown	...	...	...	...	...	...	...	...	...	..	...	...	...
Measles	8	22	2	...	...	...	...	...	...	...	...	32	...
Scarlet Fever (Scarlatina)	2	18	12	...	...	...	...	...	...	...	...	32	...
Diphtheria	...	1	1	...	...	...	...	...	...	...	...	2	...
Whooping Cough	8	21	1	...	..	...	...	...	...	...	...	30	...
Typhus Fever	...	...	...	...	...	...	...	...	...	...	...	...	...
Enteric or Typhoid Fever	...	1	6	6	4	5	3	3	...	...	...	28	2
Simple Continued and Ill-defined Fevers.	...	...	1	...	...	...	...	...	...	...	...	1	...
Other Miasmatic Diseases	2	...	...	...	...	...	...	...	...	...	...	2	..
2.—*Diarrhœal Diseases.*													
Asiatic Cholera	...	...	...	...	...	...	2	...	...	...	...	2	...
Diarrhœa. Dysentery	74	46	1	1	2	...	2	2	1	...	...	129	1
3.—*Malarial Diseases.*													
Remittent Fever	...	...	...	...	...	...	...	...	...	...	...	...	...
Ague	...	...	...	...	...	...	...	...	...	...	...	...	...
4.—*Zoogenous Diseases.*													
Cow-pox, Effects of Vaccination	...	...	...	...	...	...	...	...	...	...	...	...	...
Hydrophobia	...	...	...	...	...	...	...	...	...	...	...	...	...
Glanders	...	...	...	...	...	...	...	. .	...	...	...	...	...
Splenic Fever	...	...	...	...	...	...	...	...	...	...	...	...	...
5.—*Venereal Diseases*													
Syphilis	5	...	...	...	...	...	...	...	...	...	...	5	...
Gonorrhœa, Stricture of Urethra	...	...	...	...	...	...	...	...	...	...	...	...	...
6.—*Septic Diseases.*													
Erysipelas	2	...	...	...	...	...	...	2	...	...	...	4	1
Pyæmia, Septicœmia	...	...	...	2	1	...	...	...	...	...	...	3	...
Puerperal Fever	...	...	...	...	1	...	...	...	...	...	...	1	...
II.—PARASITIC DISEASES.													
Thrush	...	...	...	...	..	...	...	...	...	...	...	...	...
Hydatids	...	...	...	...	...	...	...	...	...	...	...	...	...
Other Animal Parasitical Diseases	...	...	...	...	...	...	...	...	...	...	..	...	...
III.—DIETIC DISEASES.													
Starvation, Want of Breast Milk	...	...	...	...	...	...	...	...	...	...	...	...	...
Scurvy	...	...	...	...	...	...	...	...	...	...	...	...	...
Chronic Alcoholism, Delirium Tremens	...	...	...	...	...	3	2	...	...	...	...	5	...
IV.—CONSTITUTIONAL DISEASES.													
Rheumatic Fever and Rheumatism of the Heart	...	...	...	...	1	...	...	...	...	...	...	1	...
Rheumatism	...	...	...	...	2	...	2	2	1	...	...	7	2
Gout	...	...	...	...	...	...	...	...	...	...	...	...	...

TABLE I.—CONTINUED.

	AGES.											Totals.	55 to 60
	0 to 1	1 to 5	5 to 15	15 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 to 75	75 to 85	85 and upwards.		
IV.—CONSTITUTIONAL DISEASES—Cont.													
Rickets	...	...	...	...	...	...	...	...	...	...	...	...	...
Cancer, Malignant Diseases	...	...	...	...	1	10	9	9	9	2	...	40	4
Tabes Mesenterica	10	21	4	...	...	...	...	...	..	...	...	35	...
Tubercular Meningitis, Hydrocephalus ...	4	16	2	...	...	1	...	...	...	...	...	23	...
Phthisis	1	3	17	39	42	25	27	10	...	...	...	164	3
Other Tubercular and Scrofulous Disease	12	20	9	5	...	1	1	...	...	...	...	48	...
Purpura, Hæmorrhagic Diathisis... ...	...	...	...	...	1	...	...	...	...	...	...	1	...
Anæmia, Chlorosis Leucocythœmia ...	...	...	...	1	...	1	...	...	...	...	...	2	...
Glycosuria, Diabetes Melitus	...	...	...	...	...	3	1	...	...	...	...	4	...
Other Constitutional Diseases	...	...	...	...	...	...	...	...	...	...	...	...	...
V.—DEVELOPMENTAL DISEASES.													
Premature Birth	59	...	...	...	...	...	...	...	...	...	...	59	...
Atelectasis	1	...	...	...	...	...	...	...	...	...	...	1	...
Congenital Malformations	5	...	...	...	...	...	...	...	...	...	..	5	...
Old Age	...	...	...	...	...	...	...	4	27	42	8	81	1
VI.—LOCAL DISEASES.													
1.—*Diseases of Nervous System.*													
Inflamation of Brain or Membranes ...	9	16	7	2	...	1	...	2	...	...	...	37	1
Apoplexy	...	1	1	...	1	7	12	11	16	4	...	53	5
Softening of Brain	...	...	...	...	...	1	...	2	1	1	...	5	2
Hemiplegia	...	...	...	1	...	...	3	3	8	4	...	19	2
Brain Paralysis	...	...	...	...	...	...	1	...	...	1	...	2	...
Insanity, General Paralysis of the Insane	...	...	...	...	...	1	1	1	1	1	...	5	...
Epilepsy	...	...	1	2	1	1	2	2	...	...	...	9	2
Convulsions	72	18	...	...	...	...	...	...	1	...	...	91	...
Laryngismus Stridulus	1	...	...	...	...	...	...	...	...	...	...	1	...
Paralysis Agitans	...	...	...	...	...	...	...	...	...	...	...	...	...
Paraplegia	...	...	...	...	...	...	...	1	...	...	...	1	...
Disease of Spinal Cord	1	...	...	...	...	...	...	...	...	...	...	1	...
Other Diseases of Nervous System ...	...	...	...	...	...	1	1	2	2	...	1	7	...
2.—*Diseases of Organs of Special Sense*													
Ear, Diseases of	...	1	...	1	...	...	1	...	...	...	...	3	...
Eyes ,, ...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nose ,, ...	...	...	...	...	...	...	...	...	...	...	...	...	...
3.—*Diseases of Circulatory System.*													
Endocarditis	...	...	2	...	1	1	...	...	...	...	...	4	...
Valvular Diseases of Heart...	...	1	...	3	3	8	13	11	7	...	...	46	2
Pericarditis	...	...	...	...	1	...	...	...	...	...	...	1	...
Other Diseases of Heart	1	1	2	6	5	14	27	18	23	4	...	101	7
Aneurism	...	...	...	...	...	1	...	...	...	...	...	1	...
Embolism, Thrombosis	...	...	...	1	...	...	...	...	...	1	...	2	...
Other Diseases of Blood Vessels	...	...	...	...	...	...	...	1	2	1	...	4	...
4.—*Diseases of Respiratory System.*													
Croup	4	9	2	...	...	...	...	...	...	...	...	15	...
Laryngitis	...	...	...	...	1	1	...	...	..	...	...	2	...
Bronchitis	69	36	3	...	3	5	13	26	15	11	2	183	8
Pneumonia	7	14	6	6	14	10	12	11	10	2	...	92	7
Broncho-Pneumonia	15	23	...	...	...	...	3	1	2	...	...	44	...
Pleuro-Pneumonia	...	...	...	...	...	2	...	...	...	...	...	2	...
Pleurisy	...	...	...	...	...	...	...	1	...	...	...	1	...
Emphysema	...	...	...	1	...	...	...	2	...	...	...	3	1
Asthma	...	...	...	...	...	...	...	...	...	...	...	...	...
Other Diseases of Respiratory System ...	...	...	...	...	...	1	...	1	...	...	...	2	1
5.—*Diseases of Digestive System.*													
Dentition	...	...	...	...	...	...	...	...	...	...	...	...	...
Sore Throat, Quinsy	...	...	...	...	...	...	...	...	...	...	...	...	...
Diseases of Stomach	3	2	...	...	1	...	4	...	...	...	...	10	...
Enteritis	24	4	2	1	1	1	...	2	1	1	...	37	1
Peritonitis	1	...	5	4	...	...	...	...	..	...	...	10	...
Obstructive Diseases of Intestine... ...	3	...	...	1	1	...	3	1	4	...	...	13	...
Ascites	...	...	...	...	...	...	...	...	...	...	...	...	...
Cirrhosis of Liver	...	...	...	1	...	3	4	3	3	1	...	15	1

TABLE 1.—Continued.

	AGES.											Totals.	
	0 to 1	1 to 5	5 to 15	15 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 to 75	75 to 85	85 and upwards.		55 to 60
VI.—Local Diseases—Continued.													
Jaundice and other Diseases of Liver ...	2	...	...	...	1	...	2	3	4	1	...	13	2
Other Diseases of Digestive System ...	...	...	...	...	2	...	1	...	1	...	...	4	...
6.—*Diseases of Lymphatic System.*													
Lymphatics and Spleen	...	...	...	...	...	...	...	...	...	...	...	..	...
7.—*Diseases of Glandlike Organs of Uncertain Use.*													
Bronchocele	...	...	...	...	...	...	...	...	...	...	...	...	...
Addison's Disease	...	...	...	...	...	...	...	...	...	...	...	...	...
8.—*Diseases of Urinary System.*													
Nephritis	...	2	...	1	...	3	4	1	...	1	...	12	...
Bright's Disease, Albuminuria	...	...	...	...	1	5	5	2	...	...	...	13	...
Disease of Bladder	...	...	...	...	...	...	1	1	...	...	...	2	1
Disease of Prostate	...	...	...	...	...	...	..	...	1	...	...	1	...
Other Diseases of the Urinary System ...	...	...	...	...	...	1	1	2	...	...	...	4	...
9.—*Diseases of Reproductive System.*													
Male Organs of Generation...	...	...	...	...	...	..	...	1	...	...	...	1	...
Female Organs	...	...	...	1	...	...	...	...	...	...	...	1	...
Abortion, Miscarriage	...	...	...	...	...	...	...	...	...	...	...	...	...
Puerperal Convulsions	...	...	...	...	...	...	...	...	...	...	...	...	...
Placenta Prœvia, Flooding...	...	...	...	...	1	...	...	...	...	...	...	1	...
Other Accidents of Childbirth	...	...	...	1	5	4	...	...	...	...	...	10	...
10.—*Diseases of Bones and Joints.*													
Caries, Necrosis	...	...	...	...	...	...	...	1	...	...	...	1	...
Arthritis, Ostitis, Periostitis	...	...	...	...	...	...	...	...	...	...	...	...	...
Other Diseases of Bones and Joints ...	...	...	...	...	...	...	...	...	...	...	...	...	...
11.—*Diseases of Integumentary System*													
Carbuncle	.	...	...	...	...	...	...	...	...	...	...	...	...
Phlegmon	...	...	...	...	...	...	...	...	...	...	...	...	...
Cellulitis...	...	...	...	...	...	...	1	1	...	...	...	2	1
Other Diseases of Integumentary System	...	...	...	...	...	...	...	...	...	...	...	...	...
VII.—Violence.													
1.—*Accident or Negligence.*													
Fractures and Contusions	1	3	3	3	1	5	1	2	3	1	..	23	1
Gunshot Wound	...	...	...	...	...	...	...	...	...	...	..	...	...
Cut, Stab	...	...	...	...	...	...	...	...	...	...	...	...	...
Burn and Scald	1	4	3	1	...	...	...	2	2	...	...	13	1
Poison	...	1	1	...	...	...	...	1	...	...	...	3	...
Drowning	...	...	3	1	3	2	1	2	2	...	...	14	...
Suffocation	4	...	...	...	...	...	..	...	...	...	...	4	...
Otherwise	1	...	...	1	1	...	...	...	...	..	...	3	...
2.—*Homicide.*													
Manslaughter	...	...	...	...	...	...	...	..	...	..	...	...	...
Murder	...	...	...	...	...	...	...	. .	...	...	...	...	...
3.—*Suicide.*													
Gunshot Wounds	...	...	...	...	...	...	...	...	...	...	...	...	...
Cut, Stab	...	...	...	...	...	...	...	2	..	...	...	2	2
Poison	...	...	...	1	...	1	...	...	...	...	...	2	...
Drowning	...	...	...	...	...	...	...	...	...	...	...	...	...
Hanging...	...	...	...	...	1	...	...	2	..	...	...	3	...
Otherwise	...	...	...	...	...	...	...	...	...	...	...	...	...
VIII.—Deaths from Ill-defined Causes.													
Dropsy	...	1	...	...	...	...	...	...	1	...	...	2	...
Debility, Marasmus, Atrophy, and Inanition	114	10	...	...	...	...	...	1	2	2	...	129	1
Mortification	...	...	...	...	...	...	...	..	...	...	...	...	...
Tumour	...	...	...	...	...	...	...	...	...	...	...	...	...
Abscess	...	...	1	1	...	...	...	1	...	...	...	3	1
Hæmorrhage	...	...	...	...	...	...	...	...	...	...	...	...	...
Sudden Death	...	...	...	...	...	...	. .	...	...	...	...	...	...
Other causes not specified or Ill-defined...	...	...	...	...	...	...	...	...	...	...	...	...	...
Influenza	...	...	...	3	...	3	2	6	5	1	...	20	3

TABLE II.—DEATHS DURING THE YEAR 1893, IN THE URBAN SANITARY DISTRICT OF SOUTH SHIELDS, CLASSIFIED ACCORDING TO DISEASES, AGES, AND LOCALITIES.

LOCALITIES.	MORTALITY FROM ALL CAUSES, AT SUBJOINED AGES.								MORTALITY FROM SUBJOINED CAUSES, DISTINGUISHING DEATHS OF CHILDREN UNDER FIVE YEARS OF AGE.																					
													FEVERS.																	
	At all ages.	Under 1 year.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and upwards.		Smallpox.	Scarlatina.	Diphtheria.	Membranous Croup.	Typhus.	Enteric or Typhoid.	Continued.	Relapsing.	Puerperal.	Cholera.	Erysipelas.	Measles.	Whooping Cough.	Diarrhœa and Dysentery.	Rheumatic Fever.	Ague.	Phthisis.	Bronchitis, Pneumonia & Pleurisy.	Heart Disease.	Injuries.	All other Diseases	TOTAL.
The Borough......	1702	522	305	91	87	481	216	Under 5...	...	19	1	1	...	1	...	...	...	...	2	30	29	119	...	...	4	174	3	12	432	827
								5 upwards	...	9	1	2	...	21	1	...	1	...	1	2	1	8	1	...	147	132	144	36	368	875
Denes Hospital..	*a*14	...	1	3	4	6	...	Under 5...	...	1	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
								5 upwards	1	3	...	...	...	6	...	..	...	2	...	...	...	...	...	...	...	...	...	...	1	13
Ingham Infirm'ry	*b*24	...	4	1	3	13	3	Under 5...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	1	4
								5 upwards	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	8	10	20
Totals.........	1740	523	310	95	94	500	219	Under 5...	...	20	1	1	...	1	...	...	...	...	2	30	29	119	...	...	4	174	3	15	433	832
								5 upwards	1	12	1	2	...	27	1	...	1	2	1	2	1	8	1	...	145	134	144	44	380	907

The subjoined numbers have also to be taken into account in judging of the above records of mortality.

Deaths occurring outside the District among persons belonging thereto.— 1. Harton Workhouse.	107	4	6	3	3	64	27	Under 5...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	2	...	...	7	10
								5 upwards	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	...	15	30	12	1	37	97
2. Whiteleas Hospital	2	1	...	...	1	...	...	Under 5...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
								5 upwards	1	...	...	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	1
Deaths occurring within the District among persons not belonging thereto.	12	...	...	...	...	10	2	Under 5...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	...	...	...	..	...	...	...	...
								5 upwards	*1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	7	3§	12

* Included in Denes Hospital deaths.
§ Two of these deaths are included in deaths at the Ingham Infirmary.

a 1 not belonging to South Shields.
b 2 not belonging to South Shields.

TABLE III.—BIRTHRATE AND DEATHRATES, SOUTH SHIELDS, 1871-93.

YEAR.	Population.	Deaths under 1 year per 1000 Births.	Gross Deathrate.	Zymotic Deathrate.	Smallpox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping Cough.	" Fever."	Diarrhœa.	Erysipelas, Pyæmia, & Puerperal Fever.	Phthisis.	Bronchitis, Pneumonia and Pleurisy.	Heart Disease.	Injuries.	Other Diseases.	Birthrate.
1871	45600	229	34·8	14·4	8·179	·46	1·71	·13	·81	1·03	2·08	·21	2·32	3·66	1·40	1·27	11·53	39·5
1872	46600	165	27·6	8·2	·365	1·43	2·48	·04	1·37	·96	1·58	·25	1·78	3·45	1·30	1·07	11·50	45·1
1873	47700	163	23·4	4·1	·000	·14	·52	·18	·18	1·04	2·09	·23	1·53	3·41	1·25	1·23	11·55	44·5
1874	48800	166	27·6	6·2	·000	·84	1·20	·06	·63	1·25	2·27	·38	1·86	4·28	1·55	·98	12·25	45·5
1875	49900	168	24·7	4·4	·000	·18	·40	·16	1·38	·88	1·48	·34	2·16	4·34	1·32	·82	11·24	44·3
1876	51000	146	22·4	3·2	·019	·07	·37	·21	·45	·56	1·58	·19	2·15	3·60	1·07	·58	11·50	44·0
1877	52200	149	22·8	4·2	·019	·09	1·34	·11	·72	·88	1·03	·28	1·97	4·61	·93	·44	10·36	44·3
1878	53400	157	24·4	6·6	·000	·44	3·14	·13	·78	·58	1·51	·26	2·00	3·91	1·46	·52	9·62	43·1
1879	54700	135	22·1	4·5	·000	·34	2·35	·11	·75	·34	·60	·18	1·49	4·55	1·07	·58	9·78	39·5
1880	55900	169	24·1	3·9	·000	·19	·91	·07	·78	·35	1·66	·14	1·82	3·98	·91	·94	12·37	41·5
Mean 1871-80		164	25·4	6·0	·858	·42	1·44	·12	·78	·79	1·59	·25	1·91	3·98	1·23	·84	11·17	43·1
1881	57300	124	18·5	1·6	·017	·45	·19	·03	·17	·31	·41	·17	1·69	3·22	1·37	·31	10·15	40·3
1882	59200	140	20·5	2·5	·017	·15	·55	·06	·76	·25	·77	·20	1·53	3·37	1·47	·67	10·70	39·0
1883	61100	140	21·2	2·3	·033	·55	·52	·04	·32	·26	·57	·09	1·89	3·33	1·32	·50	11·73	39·3
1884	63100	152	22·2	2·7	·032	·20	·23	·11	·52	·28	1·39	·17	2·47	3·23	1·75	·55	11·26	42·5
1885	65200	149	22·2	3·2	·000	·85	1·16	·04	·56	·09	·47	·10	1·74	3·98	1·58	·53	11·07	39·2
Mean 1881-85		141	20·9	2·5	·019	·44	·53	·06	·47	·24	·72	·15	1·86	3·43	1·50	·51	10·98	40·1
1886	67300	134	20·2	2·6	·015	·00	·71	·08	·65	·16	1·05	·10	1·75	3·41	1·73	·55	10·03	38·6
1887	69500	139	20·9	2·6	·014	·51	·77	·15	·10	·11	·95	·02	1·71	3·55	2·01	·59	10·38	40·0
1888	71800	114	17·6	1·2	·000	·04	·15	·12	·57	·13	·22	·13	1·85	3·28	1·67	·73	8·67	34·9
1889	74100	159	20·5	2·6	·000	·64	·13	·22	·54	·10	·98	·06	1·97	3·29	1·84	·79	9·90	36·7
1890	76600	149	21·1	1·7	·000	·02	·10	·15	·18	·24	1·00	·10	1·82	4·79	1·69	·67	10·28	37·0
Mean 1886-90		139	20·1	2·1	·005	·24	·37	·15	·40	·15	·84	·08	1·88	3·66	1·79	·67	9·85	37·4
Mean 1881-90		140	20·5	2·3	·012	·34	·45	·10	·44	·19	·78	·12	1·84	3·55	1·64	·59	10·42	38·8
1891	79067	180	22·0	2·8	·000	·90	·11	·29	·59	·18	·73	·13	1·54	4·59	1·58	·93	10·43	37·3
1892	81600	143	19·19	1·56	·000	·29	·12	·09	·33	·17	·55	·18	1·50	3·60	1·75	·47	10·12	36·5
1893	84284	180	21·9	3·09	·023	·38	·38	·02	·36	·34	1·53	·09	1·95	4·16	1·89	·71	10·06	34·59

TABLE IV.—DEATHS DURING THE YEAR 1893, IN THE URBAN SANITARY DISTRICT OF SOUTH SHIELDS, CLASSIFIED ACCORDING TO AGES, DISEASES, AND THE MONTHS IN WHICH THEY OCCURRED.

AGES AT DEATH.							MONTH.	FATAL DISEASES.																				
														CONTINUED FEVERS.														
Under 1 year.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 60.	60 and upwards.	Deaths at all ages.		Smallpox.	Measles.	Scarlet Fever.	Diphtheria.	Croup (not spasmodic).	Whooping Cough.	Typhus.	Enteric or Typhoid.	Other or Doubtful.	Diarrhœa & Dysentery.	Cholera.	Rheumatic Fever.	Erysipelas.	Pyæmia.	Puerperal Fever.	Ague.	Phthisis.	Bronchitis, Pneumonia, Influenza & Pleurisy.	Heart Disease.	Injuries.	All other diseases.
45	38	5	6	45	47	186	January	...	2	3	...	1	11	...	...	1	1	...	...	1	...	...	...	17	38	10	6	95
36	22	8	10	41	24	141	February	...	5	2	...	2	6	...	2	...	2	...	...	2	...	...	...	13	27	21	4	55
36	22	14	7	44	28	151	March	...	4	1	...	2	2	...	...	...	...	...	...	1	...	...	...	15	38	16	3	69
28	24	7	8	34	31	132	April	1	5	3	...	1	1	...	3	...	...	...	...	...	...	...	...	14	26	10	6	62
32	21	5	9	36	24	127	May	...	5	2	...	1	2	...	1	...	2	...	...	...	...	...	...	20	13	8	7	66
42	22	10	7	37	25	143	June	1	7	2	1	1	3	...	2	...	3	...	...	...	...	...	...	18	23	14	7	61
52	27	7	11	29	16	142	July	...	3	1	...	...	1	...	2	...	27	...	1	...	...	...	...	9	16	16	4	62
71	36	9	6	33	26	181	August	...	...	3	1	...	1	...	2	...	42	...	...	...	...	...	...	10	24	8	6	84
64	41	14	10	41	23	193	September	...	1	3	...	...	...	...	10	...	43	1	...	...	1	1	...	12	27	14	2	78
45	29	10	10	39	33	166	October	...	...	6	...	1	2	...	2	...	6	1	...	...	...	...	...	13	41	17	4	73
35	20	4	8	38	34	139	November	...	...	3	...	...	1	...	3	...	...	...	...	...	1	...	...	14	41	1	4	61
41	14	5	6	49	30	145	December	...	...	3	...	3	...	...	1	...	3	...	...	...	1	...	...	9	37	4	7	67
527	316	98	98	466	341	1846	Totals	2	32	32	2	12	30	...	28	1	129	2	1	4	3	1	...	164	351	159	60	833

TABLE V.—RESULT OF METEOROLOGICAL OBSERVATIONS, 1893.

TAKEN AT 9 A.M. DAILY, AT THE DENES HOSPITAL, SOUTH SHIELDS; 90 FEET ABOVE SEA LEVEL.

MONTH.	Mean Height of Barometer.	Mean Humidity.	Mean Temperature.	Highest Temperature Registered.	Lowest Temperature Registered.	Total Rain-fall (in inches).	Greatest fall in any twenty-four hours.	Number of Days on which Rain fell (·01 in. or more).	Anemometer—Mean Daily Mileage.	DIRECTION OF THE WIND—NUMBER OF DAYS.
January	29·927	84	37·1	52·0	15·0	1·74	0·55	22	260	W, NW, 13; S, SW, 9; NE, E, SE, 8; N, 1.
February	29·584	86	40·8	56·0	26·0	2·08	0·40	17	277	S, SW, 16; W, NW, 7; NE, E, SE, 4; N, 1.
March	30·000	79	43·6	64·0	23·0	0·66	0·49	9	231	W, NW, 14; S, SW, 12; NE, E, SE, 5.
April	30·197	75	45·6	62·0	30·0	0·46	0·27	9	170	NE, E, SE, 15; W, NW, 7; N, 5; S, SW, 3.
May	30·127	71	51·6	68·0	38·0	1·37	0·42	14	147	NE, E, SE, 16; S, SW, 6; W, NW, 6; N, 3.
June	29·953	73	58·1	74·0	35·0	0·91	0·29	9	132	NE, E, SE, 12; S, SW, 8; W, NW, 7; N, 3.
July	29·821	75	58·0	71·5	42·0	1·79	1·17	19	164	NE, E, SE, 11; W, NW, 10; S, SW, 6; N, 4.
August	29·891	77	61·7	84·0	42·5	1·65	0·41	16	172	S, SW, 13; W, NW, 9; NE, E, SE, 8; N, 1.
September ...	29·789	75	54·8	73·0	33·0	1·78	0·31	18	194	S, SW, 15; W, NW, 12; NE, E, SE, 2; N, 1.
October....	29·871	83	49·3	59·0	44·0	0·85	0·23	10	169	S, SW, 19; W, NW, 12.
November ...	29·923	81	42·4	57·5	26·0	2·70	0·34	26	190	S, SW, 11; NE, E, SE, 9; W, NW, 6; N, 4.
December ...	29·811	85	41·2	53·5	21·0	1·29	0·27	20	211	S, SW, 24; W, NW, 5; NE, E, SE, 2.
TOTALS ...	...	...	...	...	...	17·28	...	189	...	

TABLE VI.—POPULATION, BIRTHS, AND NEW CASES OF INFECTIOUS SICKNESS, COMING TO THE KNOWLEDGE OF THE MEDICAL OFFICER OF HEALTH, DURING THE YEAR 1893, IN THE URBAN SANITARY DISTRICT OF SOUTH SHIELDS; CLASSIFIED ACCORDING TO DISEASES, AGES, AND LOCALITIES.

LOCALITIES.	Population at all Ages.		Registerd Births.	Aged under 5 or over 5.	New Cases of Sickness in each Locality, coming to the knowledge of the Medical Officer of Health.												Number of such Cases removed from their Homes in the several Localities for Treatment in Isolation Hospital.											
					1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
									Fevers.												Fevers.							
	Census 1891.	Estimated to middle of 1893.			Smallpox.	Scarlatina.	Diphtheria.	Membranous Croup.	Typhus.	Enteric or Typhoid.	Continued.	Relapsing.	Puerperal.	Cholera.	Erysipelas.	Totals.	Smallpox.	Scarlatina.	Diphtheria.	Membranous Croup.	Typhus.	Enteric or Typhoid.	Continued.	Relapsing.	Puerperal.	Cholera.	Erysipelas.	Totals.
The Borough............	78391	84284	2916	under 5	5	197	8	5	...	12	1	1	...	...	3	232	5	38	...	...	...	1	...	...	...	...	...	44
				5 upwds	39	411	42	3	...	159	6	5	10	2	109	786	39	118	...	...	...	38	...	...	...	2	...	197
Ingham Infirmary ...	...	...	...	under 5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
				5 upwds	1	1	1	...	...	...	...	...	...	...	1	4	1	1	...	...	...	...	...	...	...	...	...	2
Totals	78391	84284	2916	under 5	5	197	8	5	...	12	1	1	...	...	3	232	5	38	...	...	...	1	...	...	...	...	...	44
				5 upwds	40	412	43	3	...	159	6	5	10	2	110	790	40	119	...	...	...	38	...	...	...	2	...	199

INSPECTOR OF NUISANCES' REPORT.

TABLE I.—STATUTORY NOTICES ISSUED FROM THE HEALTH DEPARTMENT DURING THE YEAR 1893.

To Cleanse and reinstate choked private drains and water closets	274
,, Remedy defective and absence of proper drainage	52
,, Remove offensive accumulations of refuse from premises	168
,, Repair defective water closets	37
,, Provide water closet or privy accommodation	16
,, Remove offensive privy middens and substitute privy receptacles	62
,, Cleanse and repair filthy premises, yards, water closets, privy middens, and privy receptacles	73
,, Cease putting liquid into privy middens and privy receptacles	28
,, Cement, pave, and repair defective yard surfaces	28
,, Abate overcrowding	4
,, Provide ventilation to premises	2
,, Provide hatches to privy middens and privy receptacles	39
,, Provide water supply	22
,, Cease keeping animals to be a nuisance	17
,, Provide extra privy accommodation	4
,, Limewash and purify houses, rooms, and passages	315
,, Cleanse and fill in offensive rain water tanks	3
,, Cure dampness	29
,, Drain land causing dampness to adjoining property	1
,, Abate smoke nuisance	3
,, Disinfect premises	722
,, Cleanse and repair insanitary bakehouses	1
,, Cleanse and repair insanitary slaughter houses	1
,, Notices served upon owners under Housing of the Working Classes Act	18
,, Notices served upon tenants under Housing of the Working Classes Act	36
,, Notices to close cellar dwellings	3
Total	1958

TABLE II.—OTHER WORK OF THE DEPARTMENT.

Cautions sent to fruiterers and others concerning the sale of unsound fruit, &c.	72
Examinations of systems of house drainage, by smoke test and otherwise (40 of which were found defective and remedied)	51
Seamen's boarding houses, measured as to cubic space, etc............	43
Tenements closed as unfit for habitation	34
Cases removed to hospital—Deans 214, Whiteleas 50..	264
Parcels of bedding, etc., disinfected	597
Rooms fumigated	583
2 carcases of meat condemned and destroyed.	
1 pair beast's lungs do. do.	
1 beast's liver do. do.	
18 sheeps' plucks do. do.	
12 stone tomatoes do. do.	
2 bags mussels do. do.	
6 beds destroyed.	
13 mattresses destroyed.	
6 parcels bedding destroyed.	

TABLE III.—PROCEEDINGS BEFORE THE JUSTICES, UNDER THE PUBLIC HEALTH ACTS.

Date of Hearing.	Offence.	Result.
June, 1893	Allowing Offensive Liquid to Flow over the Public Street (11 Prosecutions)	Fined 2s. 6d. each.
December, 1893 .	Being in Possession of a Carcase of Diseased Meat (2 Prosecutions)	Fined £5 each and costs.

TABLE IV.—FOOD AND DRUGS ACT.

THE UNDERNOTED SAMPLES HAVE BEEN EXAMINED BY THE PUBLIC ANALYST.

Description of Articles.	No. of Samples.	Result.	Proceedings.
Milk	6	4 Genuine	None.
		1 of Doubtful Genuineness	None.
		4½% added water ...	None.

I am, Mr. Chairman and gentlemen,

Your obedient servant,

J. J. HINDMARCH,

Inspector.